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EXAMINER

WEEKS, GLORIA R

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/652,742

Applicant(s)

KRAENZLE, DAVID G.

Examiner

Gloria R. Weeks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 29-47, 50, 51 and 54-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 29-47, 50, 51 and 54-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
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Response to Amendment

1. This action is in response to Applicants' amendment received on June 16, 2005.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 7-9, 29, 30, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Bailey (USPN 5,683,247).

In reference to claims 1-2, 7-9, 29, 30, 50 and 51, Kubota et al. discloses a machine adapted to assemble a product, the product having a body (13), first and second gears (16a, 16b) an additional component (17), the machine comprising: feeders which automatically supply component parts (21a, 21b); contiguous assembly stations (ST1-ST8) coupled to the feeders to receive the component parts (13, 16a, 16b, 17) and to assemble the product; a body station (ST1-ST2) which receive and holds the body (13) of the product; at least two gear stations (ST3-ST6) that introduce the first and second gears (16a, 16b) of the product into the body (13); a lubricating station (ST-7) to apply lubricant to the gears (16a-16c) of the product (column 8, lines 45-58; column 9, lines 36-44); a tool station (ST3) which connects the additional component (17) to the second gear (16b) of the product; and a sensor (30) that detects the presence of the body (13), the first and second gears (16a, 16b) and the tool (17) to ensure that the product has been properly assembled (column 13, lines 23-25). Although the additional

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component attached to the second gear is not a tool, it would have been obvious to attach any desired component, such as a tool, in place of the component disclosed.

The product assembled by Kubota et al. is not disclosed to be the specific dental product claimed by applicant, however, Kubota et al. does state that an array of products could be assembled by the machine disclosed (column 1, lines 5-21, 58-68; column 2, lines 1-2). Bailey et al. teaches assembling a dental product using components comprising of a body (3), first and second gears (17, 50), and a tool (73). It would have been obvious to one having ordinary skill in the art at the time the invention was made to assemble the product of Bailey et al. using the machine of Kubota et al. for the process of making the dental product in larger quantities while reducing the cost of manufacturing.

Regarding claim 29, Kubota et al. discloses a machine for assembling a product, the product comprising a body (13) and first and second gears (16a, 16b), the machine comprising: a movable table (22); a plurality of fixtures (3) located on the movable table (22) to hold the body (13) of the product during phases of assembly (column 5, lines 19-25); a plurality of station (ST1-ST8) that perform steps of assembly of the product in sequence with the movable table 22); a body feeder (table 2) that supplies the body (13) to a body isolator (21a), the body isolator (21a) isolating the single body (13) from the body feeder (column 6, lines 51-64), and a body pick-and-place unit (21a) that moves the isolated body (13) from the body isolator (21a) to one of the fixtures; a first gear feeder (29) supplying the first gear (16a) to a first gear isolator (21a) isolating a single first gear (16a) from the first gear feeder (29), and a first gear pick-and place unit (21a) that moves the isolated first gear (16a) from the first gear isolator to one of the fixtures (12a) on which a body (13) is located; and a second gear feeder (29) supplying the second gear (16b) to a first gear isolator (21a) isolating a single second gear (16b) from the second gear

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feeder (29), and a second gear pick-and place unit (21a) that moves the isolated second gear (16b) from the second gear isolator to one of the fixtures (12b) on which a body (13) is located (column 8, lines 45-64). The product assembled by Kubota et al. is not disclosed to be the specific dental product claimed by applicant, however, Kubota et al. does state that an array of products could be assembled by the machine disclosed (column 1, lines 5-21, 58-68; column 2, lines 1-2). Bailey et al. teaches assembling a dental product using components comprising of a body (3), first and second gears (17, 50), and a tool (73). It would have been obvious to one having ordinary skill in the art at the time the invention was made to assemble the product of Bailey et al. using the machine of Kubota et al. for the process of making the dental product in larger quantities while reducing the cost of manufacturing.

With respect to claim 30 and its limitations as stated above, the modified apparatus of Kubota et al. discloses a machine wherein the product comprises a tool (17) and the machine further comprising a tool feeder (29) for supplying the tool (17) to a tool isolator (30), the tool isolator (30) isolating a single tool (17) from the tool feeder (29), and a tool pick-and-place unit () for moving the isolated tool (17) from the tool isolator (30) and placing it on the second gear (16b; column 5, lines 50-56; column 9, lines 3-20).

4. Claims 3-6 and 11-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Bailey (USPN 5,683,247) as applied to claims 1 and 7 above, and further in view of Nakagawa et al. (USPN 6,460,312) and Kitagawa et al. (USPN 5,622,025).

With respect to claim 3, 4, 11 and 12 and their limitations as stated above, the modified apparatus of Kubota et al. discloses moving assembled products to a finished product container (31), but does not disclose any further packaging of the finished products. Nakagawa et al.

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teaches an product bagging apparatus (M1), comprising a first conveyor (100) that moves products to a bagging unit (200); a second conveyor (600) that moves bagged products (M1) to a batch-counting unit (700); an accumulating conveyor which supplies containers (B) to the batch-counting unit (700) and moves containers (B) with the bagged products (M1) to an unloading station. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the machine of Kubota et al. to include the packaging assembly of Nakagawa et al. for the purpose of maintaining the assembled products in a sterile environment, and to prevent damage during shipping.

In reference to claims 5, 6, 13 and 14, the modified apparatus of Kubota et al. in view of Nakagawa et al. discloses an assembly and packaging system, but does not specifically disclose the use of packaging assembly having a first and second accumulating conveyor and a container sealing unit. Kitagawa et al. discloses a packaging apparatus having a bagging unit (W); a conveyor for moving bagged products (X) to a batch-counting unit (P4); a first accumulating conveyor (101) for supplying containers (Y) to the batch-counting unit (P4); and a second accumulating conveyor (103) for moving the bagged product (X) filled container (Y) to a sealing and unloading station. It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the packaging system of Kubota et al. in view of Nakagawa et al. to include the first and second accumulating conveyor of Kitagawa et al. for the purpose of separately controlling the supply of containers from the discharge of containers.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Bailey (USPN 5,683,247) as applied to claim 9 above, and further in view of Fleming et al. (USPN 4,971,189).

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In reference to claim 10 and its limitations as stated above, the modified apparatus of Kubota et al. discloses a component assembling machine that forms a product, using a processor (30) to monitor the presence and proper assembly of the components of the product. Kubota et al. in view of Bailey does not disclose a diverter that separates misassembled products from correctly assembled products. Fleming et al. teaches an assembling machine with multiple stations to manufacture a product using conveying means to transport the product as assembled, as well as sensors for detecting the presence of a properly assembled product and a product diverter that separates assembled products having missing components (column 2, lines 45-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the machine of Kubota et al. to include the product diverter of Fleming et al. for the purpose of redirecting an misassembled products to prevent them from being bagged and packaged.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Bailey (USPN 5,683,247), Fleming et al. (USPN 4,971,189), and Nakagawa et al. (USPN 6,460,312) and Kitagawa et al. (USPN 5,622,025).

Kubota et al. discloses a machine adapted to assemble a product, the product having a body (13), first and second gears (16a, 16b) and a tool (17), the machine comprising: feeders that automatically supplying the component parts (21a, 21b); contiguous assembly stations (ST1-ST8) coupled to the feeders for receiving the component parts (13, 16a, 16b, 17) and for performing assembly steps of the product, the assembly stations comprising a body station (ST1-ST2) for receiving and holding the body (13) of the product, at least two gear stations (ST3-ST6) for introducing the first and second gears (16a, 16b) of the product into the body (13), and a tool station (ST3) for connecting the tool (17) to the second gear (16b) of the product. The product

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assembled by Kubota et al. is not disclosed to be the specific dental product claimed by applicant, however, Kubota et al. does state that an array of products could be assembled by the machine disclosed (column 1, lines 5-21, 58-68; column 2, lines 1-2). Bailey et al. teaches assembling a dental product using components comprising of a body (3), first and second gears (17, 50), and a tool (73) which is a prophy cup. It would have been obvious to one having ordinary skill in the art at the time the invention was made to assemble the product of Bailey et al. using the machine of Kubota et al. for the process of making the dental product in larger quantities while reducing the cost of manufacturing.

The modified apparatus of Kubota et al. discloses a machine for assembling components to form a product, using a processor (30) to monitor the presence and proper assembly of the components of the product. Kubota et al. in view of Bailey does not disclose a diverter for separating misassembled products from correctly assembled products. Fleming et al. teaches a machine with multiple stations for assembling components to manufacture a product using conveying means to transport the product as assembled, as well as sensors for detecting the presence of a properly assembled product and a product diverter for separating assembled products having missing components (column 2, lines 45-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the machine of Kubota et al. to include the product diverter of Fleming et al. for the purpose of redirecting an misassembled products to prevent them from being bagged and packaged.

The modified apparatus of Kubota et al. discloses moving assembled products to a finished product container (31), but does not disclose any further packaging of the finished products. Nakagawa et al. teaches an apparatus for packaging products in bags (M1), comprising a first conveyor (100) for moving products to a bagging unit (200); a second conveyor (600) for

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moving bagged products (M1) to a batch-counting unit (700); an accumulating conveyor for supplying containers (B) to the batch-counting unit (700) and for moving containers (B) with the bagged products (M1) to an unloading station. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the machine of Kubota et al. to include the packaging assembly of Nakagawa et al. for the purpose of maintaining the assembled products in a sterile environment, and to prevent damage during shipping.

The further modified apparatus of Kubota et al. in view of Nakagawa et al. discloses an assembly and packaging system, but does not specifically disclose the use of packaging assembly having a first and second accumulating conveyor and a container sealing unit. Kitagawa et al. discloses a packaging apparatus having a bagging unit (W); a conveyor for moving bagged products (X) to a batch-counting unit (P4); a first accumulating conveyor (101) for supplying containers (Y) to the batch-counting unit (P4); and a second accumulating conveyor (103) for moving the bagged product (X) filled container (Y) to a sealing and unloading station. It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the packaging system of Kubota et al. in view of Nakagawa et al. to include the first and second accumulating conveyor of Kitagawa et al. for the purpose of separately controlling the supply of containers from the discharge of containers.

7. Claims 31-47, 64 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Gamberg et al. (USPN 4,184,840).

In reference to claims 31, 33, 37, 39 and 44, Kubota et al. discloses a machine for assembling a product, the product comprising a body (13) and first and second gears (16a, 16b),

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the machine comprising: a plurality of mounting posts¹ (3) for supporting the product being assembled, a movable table (22) for supporting the plurality of mounting areas through a plurality of stations of assembly (column 5, lines 19-25); a body station (table 2) having a body feeder for orienting a body (13) on the mounting area (23) at the body station; a first gear member station (29) having a first gear feeder for orienting a first gear (16a) on the body in the mounting area ; a second gear station (29) having a second gear feeder for orienting a second gear (16b) on the body in the mounting area; a lubrication station (ST-7); and a station which feeds and attaches a third component on the body on the mounting area at the tool station (column 8, lines 45-64). Although the third component of Kubota et al. is not the claimed tool of the Applicant, it would have been obvious to one having ordinary skill at the time the invention was made to substitute the third component of Kubota et al. with any desired component, such as the claimed product, since Kubota et al. is not limited to the production of one specific product.

Furthermore, Applicant's invention is drawn to an apparatus and the structural limitations that define the apparatus, not the use of the apparatus. Bailey et al. teaches assembling a dental product using components comprising of a body (3), first and second gears (17, 50), and a tool (73). Since Kubota et al. does state that an array of products could be assembled by the machine disclosed (column 1, lines 5-21, 58-68; column 2, lines 1-2), it would have been obvious to one having ordinary skill in the art at the time the invention was made to assemble the product of Bailey et al. using the machine of Kubota et al. for the process of making the dental product in larger quantities while reducing the cost of manufacturing.

¹ **post** (post) *noun* *n* assigned position or station, *The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction and distribution restricted in accordance with the Copyright Law of the United States. All rights reserved.

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In reference to claims 32, 38 and their limitations as stated above, Kubota et al. discloses a system and machine for assembling a product including a plurality of assembly stations, however, Kubota et al. does not disclose the use of a closing station. Examiner takes Official Notice that the use of closing stations is well known in the art of assembly of products with hinged elements. This knowledge is supported in prior art Ilseman (USPN 4,685,277).

Regarding claims 34-36, 41-43, 45-47, 64 and 68 Kubota et al. does not specifically disclose whether or not the mounting post is a pocket or a vertical support, Gamber et al. teaches a rotary support table having mounting posts (32) adapted to support an workpiece internally (figure 9) without any contact with the exterior of the workpiece. It would have been obvious to one having ordinary skills in the art to modify the mounting posts of Kubota et al. to the mounting posts of Gamber et al. for the purpose of supporting a workpiece internally, thus allowing for unobstructed external treatment of the workpiece. Although Gamber et al. does not disclose a mounting post having a passageway positioned for alignment with a shaft of the workpiece, Examiner takes Official Notice that the use of a "key and slot" mechanism is well known in the art of mounting objects for the purpose of securing or locking elements onto a surface.

8. Claims 54-57 and 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Bailey (USPN 5,683,247) as applied to claims 1, 7, 29 and 30 above, and further in view of Best (USPN 5,680,694).

With respect to claim 54, the modified apparatus of Kubota et al. discloses tape and tray feeders to supply bodies, gears and tools to robotic arms, but does not disclose vibratory feeders. Best teaches vibratory feeders as an equivalent feeding structure in the art (column 1 lines 37-43). Therefore, because these two elements were art-recognized equivalents at the time of the

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invention, one of ordinary skill in the art would have found it obvious to substitute the vibratory feeder of Best for the tray or tape feeders of Kubota.

In reference to claim 55, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses performing different operation in the assembly of a product at different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

Regarding claim 56, the modified apparatus of Kubota et al. discloses tape and tray feeders to supply bodies, gears and tools to robotic arms, but does not disclose vibratory feeders. Best teaches vibratory feeders as an equivalent feeding structure in the art (column 1 lines 37-43). Therefore, because these two elements were art-recognized equivalents at the time of the invention, one of ordinary skill in the art would have found it obvious to substitute the vibratory feeder of Best for the tray or tape feeders of Kubota.

With respect to claim 57, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses performing different operation in the assembly of a product at different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

In reference to claim 60, the modified apparatus of Kubota et al. discloses tape and tray feeders to supply bodies, gears and tools to robotic arms, but does not disclose vibratory feeders. Best teaches vibratory feeders as an equivalent feeding structure in the art (column 1 lines 37-43). Therefore, because these two elements were art-recognized equivalents at the time of the invention, one of ordinary skill in the art would have found it obvious to substitute the vibratory feeder of Best for the tray or tape feeders of Kubota.

Regarding claim 61, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses performing different operation in the assembly of a product at different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

In reference to claim 62, the modified apparatus of Kubota et al. discloses tape and tray feeders to supply bodies, gears and tools to robotic arms, but does not disclose vibratory feeders. Best teaches vibratory feeders as an equivalent feeding structure in the art (column 1 lines 37-43). Therefore, because these two elements were art-recognized equivalents at the time of the invention, one of ordinary skill in the art would have found it obvious to substitute the vibratory feeder of Best for the tray or tape feeders of Kubota.

9. Claims 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Bailey (USPN 5,683,247), Fleming et al. (USPN 4,971,189), Nakagawa et al. (USPN 6,460,312) and Kitagawa et al. (USPN 5,622,025) as applied to claim 15 above, and further in view of Best (USPN 5,680,694).

In reference to claim 58, the modified apparatus of Kubota et al. discloses tape and tray feeders to supply bodies, gears and tools to robotic arms, but does not disclose vibratory feeders. Best teaches vibratory feeders as an equivalent feeding structure in the art (column 1 lines 37-43). Therefore, because these two elements were art-recognized equivalents at the time of the invention, one of ordinary skill in the art would have found it obvious to substitute the vibratory feeder of Best for the tray or tape feeders of Kubota.

Regarding claim 59, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses an assembly table (1) surrounded by stations (S1-S11) performing different operation in the assembly of a product at

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different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

10. Claims 63, 66, 67 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Gamberg et al. (USPN 4,184,840) as applied to claims 31, 32, 37 and 44 above, and further in view of Best (USPN 5,680,694).

With respect to claim 63, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses performing different operation in the assembly of a product at different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

In reference to claim 66, the modified apparatus of Kubota et al. discloses tape and tray feeders to supply bodies, gears and tools to robotic arms, but does not disclose vibratory feeders. Best teaches vibratory feeders as an equivalent feeding structure in the art (column 1 lines 37-43). Therefore, because these two elements were art-recognized equivalents at the time of the invention, one of ordinary skill in the art would have found it obvious to substitute the vibratory feeder of Best for the tray or tape feeders of Kubota.

Regarding claim 67, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses performing different operation in the assembly of a product at different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

With respect to claim 69, Kubota et al. discloses various embodiments of assembly station configurations, of which the embodiment illustrated in figure 1 discloses performing different operation in the assembly of a product at different stations, wherein the assembly operations at each station occurs simultaneously with the assembly operation at other stations.

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11. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (USPN 5,247,733) in view of Gamberg et al. (USPN 4,184,840) as applied to claim 32 above, and further in view of Beezer et al. (USPN 4,881,356).

The modified apparatus of Kubota et al. discloses an assembling device including multiple stations, but does not disclose a closing station. Beezer et al. teaches that is known to provide a closing station including a closer mechanism (44) including and an actuator linkage (38), the actuator linkage being movable between an open and closed position to engage and move the closure member to the closed position (figure 20). It would have been obvious to one having ordinary skill in the art to modify the assembling device of Kubota et al. to incorporate the closing station of Beezer et. for the purpose of accommodating a product require a closing operation.

Response to Arguments

12. Applicant's arguments filed June 16, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the apparatus of Kubota is not used to make dental product, Examiner would like to acknowledge the structural limitations met by Kubota regarding applicant's invention. Recitation of the intended use of the claimed invention, such as the use of producing a specific product, must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative

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difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Applicant further argues that the manner in which the machine of Kubota would be capable of assembling the dental product of Bailey cannot be ascertained. Specifically, whether the various hands and tools of Kubota are capable of handling the components of a dental assembly, as disclosed by Bailey. Applicant has not articulated any specific structural limitations of the feeders that would warrant the apparatus of Kubota as incapable of producing a product as disclosed by Bailey. Additionally, Examiner has found that the components (i.e. gears and tools) handled by the apparatus of Kubota are compatible in size to that of the dental product disclosed by Kubota.

Applicant also argues that the secondary reference, Bailey, allows for inexpensive manufacturing of DPA, thereby providing no incentive or suggestion for combination with the manufacturing machine of Kubota. While cost is one advantage for the combination of Kubota and Bailey, mass production is disclosed as being an additional advantage of combining Kubota and Bailey (Kubota – column 1 line 61-column 2 line 2; Bailey – column 2 lines 6-8).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Examiner agrees that the mere mentioning of automated assembly of a product does not provide motivation. In this case, as Examiner has previously attested, the apparatus of Kubota provides a motivation of mass production of products previously disclosed as being difficult to produce on a mass production scale, which is

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supported by the acknowledgement of Bailey that there is a desire for mass production a DPA (Bailey – column 1 lines 13-16, column 2 lines 6-8). The apparatus of Kubota would not be applicable in the production of an automobile or an entire CPU, as the components of Kubota are configured to handle elements of a smaller size. However, the apparatus of Kubota is capable of the mass production of parts of an automobile (e.g. radio parts) or a CPU (e.g. disc drive).

Regarding claim 10, Applicant has argued that there is no motivation to incorporate the diverter of Fleming into the machine of Kubota, nor is there teaching of how the diverter of Fleming could be integrated into the machine of Kubota. The motivation for incorporating a product diverter in a product assembly device is provided in column 2 lines 58-60 of Fleming, which basically states that such a device prevents the packaging of faulty products, inherently eliminating waste of packaging material. Furthermore, column 2 lines 61-65 of Fleming states that the diverter of Fleming can be incorporated into machines of multiple configurations and including various stations, specifically in the vicinity of areas 7 and 8 of Kubota, as illustrated in figure 12E.

With respect to claims 31, 37 and 44, Applicant has argued that neither Kubota nor Gamberg disclose different assembling operations at different stations. Examiner disagrees based on column 1 lines 25-38 which discloses that it is known in the art of product assembly to convey a product through a plurality of stations wherein each stations provides, at most, three operations on the product.

Regarding claims 32 and 38, Applicant has argued that the prior art does not disclose a closing station for closing a hinged closure. As claims 32 and 38 do not invoke 35 USC 112 6th paragraph, with respect to “means plus function” language, Applicant’s limitations are only drawn to a product assembly apparatus comprising a closing station. Thus, Examiner maintains

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assessment that the incorporation of a closing station in a product assembly apparatus is well known, and can be supported by Ilseman, which teaches a product assembly device comprising a movable table which conveys a product body through multiple station, the multiple stations including a closing station for the purpose of sealing the product.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R. Weeks whose telephone number is (571) 272-4473. The examiner can normally be reached on 8:30 am - 7:00 pm Monday-Thursday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

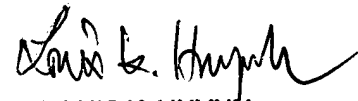
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Gloria R Weeks
Examiner
Art Unit 3721



grw

September 6, 2005



LOUIS K. HUYNH
PRIMARY EXAMINER